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PTO/SB/05 (11-00) Approved for use through 10/31/2002 OMB 0651-0032

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## UTILITY PATENT APPLICATION **TRANSMITTAL**

Attorney Docket No. NTT\_3.2.142/3516 Shiquan WU et al First Inventor ADAPTIVE TIME DIVERSITY AND SPATIAL DIVERSITY FOR OFDM

Express Mail Label No. EL694443085US

| Chily for new horiprovision  | iai applications under 37 Of IC 7 33(b))  | 1 ^ /  | 0.000   | mair Eabor 710:  |            |          |                  |  |  |
|--|---|--------|---|--|------------|----------|------------------|--|--|
| APPLICA  | TION ELEMENTS   |        | ADDI  | TOO TO.  |            |          | oner for Patents |  |  |
| See MPEP chapter 600 cond  | erning utility patent application contents  | s.     |   |  |            |          |                  |  |  |
| 1. X Fee Transmittal For Submit an original and a see 37 CFR 1.27. 3. X Specification (preferred arrangement - Descriptive tittle - Cross Reference - Statement Regalar - Reference to see or a computer properties of the submary - Brief Summary - Brief Description - Detailed Description - Claim(s) - Abstract of the submary - Brief Description - Detailed Description - Claim(s) - Claim(s) - Abstract of the submary - Brief Description - Claim(s) - Clai | orm (e.g., PTO/SB/17) duplicate for fee processing) mall entity status.  [Total Pages]  It set forth below) of the invention to Related Applications arding Fed sponsored R & D quence listing, a table, rogram listing appendix the Invention of the Invention n of the Drawings (if filed) ption  Disclosure  I.S.C. 113)  [Total Sheets]  [Total Pages]  Luted (original or copy) prior application (37 CFR 1.63 (d)) tion/divisional with Box 18 completed) |        | ADDRESS TO: Box Patent Application Washington, DC 20231  7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. paper c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  9. Assignment Papers (cover sheet & document(s)) 10. (when there is an assignee) 11. English Translation Document (if applicable) 12. Information Disclosure Statement (IDS)/PTO-1449 13. Preliminary Amendment 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) |  |            |          |                  |  |  |
| Signed sta<br>named in<br>1 63(d)(2)   | ION OF INVENTOR(S) tement attached deleting inventor(s) the prior application, see 37 CFR and 1 33(b).  Sheet. See 37 CFR 1.76  |        | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed)  16. Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.  17. Other:  |  |            |          |                  |  |  |
| or in an Application Data She Continuation Prior application information   | CATION, check appropriate box, and steet under 37 CFR 1.76:  Divisional Continuation-in-part (CI  Examiner  ONAL APPS only: The entire disclosure of the according to the relied upon when a portion  19. CORRESPON   | iP)    | r applica<br>or divis   | site information below  pnor application No Group Art Unit  tion, from which an oath ional application and is I from the submitted app | and in a p | orelimii | nary amendment,  |  |  |
| Customer Number or Bar (   | Code Label  | i din  | h laher h   | or X   | Correspon  | dence a  | ddress below     |  |  |
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| City   | New York  |        | ate   | NY   |            |          | 10022            |  |  |
| Country  | USA 7   | Teleph | one   | 212-4864000  | Fa         | X        | 212-486400       |  |  |
| Name (Print/Type)  | Robert J. Hess  |        | Regi  | stration No. (Attorne  | y/Agent)   | 32       | ,139             |  |  |
| Signature  | Milut I for   |        |   |  | Date       | 29       | DEC 00           |  |  |

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## FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid See Forms PTO/SB/09-12.

Complete if Known Application Number To be assigned Filing Date Concurrently herewith First Named Inventor Shiquan WU et al Group Art Unit To be assigned Examiner To be assigned

|   |        |         |        |   |     |                          | Exan                        | niner   |  | To be assigned                 |  |   |          |  |
|---|--------|---------|--------|---|-----|--------------------------|-----------------------------|---|--|--------------------------------|--|---|----------|--|
| TOTAL AMOUNT OF PAYMENT (\$) 1.278 00   |        |         |        |   |     |                          |                             | ı   | Attorney Docket NTL-3 2 142/3516<br>Number |                                |  |   |          |  |
| METHOD OF PAYMENT (check one)   |        |         |        |   |     |                          | FEE CALCULATION (continued) |   |  |                                |  |   |          |  |
| t. [ ] The Commissioner is authorized to charge indicated fees and credit any overpayments to |        |         |        |   |     | 3. ADDITIONAL FEES       |                             |   |  |                                |  |   |          |  |
| Deposit Account Number:   |        |         |        |   |     |                          |                             | Large Entity Small Entity                               |  |                                |  |   |          |  |
| Deposit Account Name: COBRIN & GITTES   |        |         |        |   |     |                          |                             | Code  | (\$)                                       | Code                           | (\$)   | Fee Description   | Fee Paid |  |
| [ ]_Charge any additional fee required under 37 CFR 1 16 and 1 17                             |        |         |        |   |     |                          | 105                         | 130   | 205  | 65                             | Surcharge - Late filing fee or oath                            |   |          |  |
| 2. [ ] Payment Enclosed:  |        |         |        |   |     |                          |                             | 127   | 50   | 227                            | 25   | Surcharge - late provisional filing fee or cover sheet      |          |  |
| [ ] Check [ ] Money Order [ ] Other   |        |         |        |   |     |                          |                             | 139   | 130  | 139                            | 130  | Non-English specification                                   |          |  |
|   |        |         | FEE    | CALCULATI   | NC  |                          |                             | 147   | 2,520                                      | 147                            | 2,520  | Request for Reexamination                                   |          |  |
| 1. BASIC FILING FEE   |        |         |        |   |     |                          |                             | 112   | 920*                                       | 112                            | 920*   | Req publication of SIR prior to Examiner action             |          |  |
| Large I   | Entity | Small E | Entity |   |     |                          |                             | 113   | 1,840                                      | 113                            | 1,840  | Requesting publication of SIR after Examiner action         |          |  |
| Code:   | (\$)   | Code    | (\$)   | Fee Descript  | on  |                          | Fee Paid                    | 115   | 110  | 215                            | 55   | Extension within first month                                |          |  |
| 101   | 710    | 201     | 355    | Utility filing  | fee |                          | \$ 710 00                   | 116   | 390  | 216                            | 195  | Extension within second month                               |          |  |
| 106   | 320    | 206     | 160    | Design filing   | fee |                          |                             | 117   | 890  | 217                            | 445  | Extension within third month                                |          |  |
| 107   | 490    | 207     | 245    | Plant filing fee  |     |                          |                             | 118   | 1,390                                      | 218                            | 695  | Extension within fourth month                               |          |  |
| 108   | 710    | 208     | 355    | Reissue filing fee  |     |                          |                             | 128   | i,890                                      | 228                            | 945  | Extension within fifth month                                |          |  |
| 144   | 150    | 214     | 75     | Provisional filing fee                                    |     |                          |                             | 119   | 310  | 219                            | 155  | Notice of Appeal  |          |  |
| SUBTOTAL (1) \$ 710 00  |        |         |        |   |     |                          | 120                         | 310   | 220  | 155                            | Brief in support of an appeal                                  |   |          |  |
| 2. EXTRA CLAIM FEES   |        |         |        |   |     | 121                      | 270                         | 221   | 135  | Request for oral hearing       |  |   |          |  |
| Extra Claim Fee below Fee Due   |        |         |        |   |     | Fee Due                  | 138                         | 1,510   | 138  | 1,510                          | Petition to institute a public use proceeding                  |   |          |  |
| Total Clai  | ms     | 36      | -20 =  | 16 x  |     | 9 or 18                  | \$288 00                    | 140   | 110  | 240                            | 55   | Petition to revive - unavoidable                            |          |  |
| Indep. Cla  | ims    | 6       | -3 =   | 3 x   |     | 40 or 80                 | \$ 240 00                   | 141   | 1,210                                      | 241                            | 605  | Petition to revive - unintentional                          |          |  |
| Multiple Dependent 130 \$   |        |         |        |   |     | 142                      | 1,240                       | 241   | 620  | Utility issue fee (or reissue) |  |   |          |  |
| ** or number previously paid, if greater; for reissues, see below                             |        |         |        |   |     |                          | 143                         | 440   | 243  | 220                            | Design issue fee   |   |          |  |
| Large Entity Small Entity   |        |         |        |   |     | 144                      | 600                         | 244   | 300  | Plant issue fee                |  |   |          |  |
| Code  | (\$)   | Code    | (\$)   | Fee Description   |     |                          |                             | 122   | 130  | 122                            | 130  | Petitions to the Commissioner                               |          |  |
| 103   | 18     | 203     | 9      | Claims in excess of 20                                    |     |                          |                             | 123   | 50   | 123                            | 50   | Petitions related to provisional applications               |          |  |
| 102   | 80     | 202     | 40     | Independent claims in excess of 3                         |     |                          |                             | 126   | 240  | 126                            | 240  | Submit Info Disclosure Stmt                                 |          |  |
| 104   | 270    | 204     | 135    | Multiple dependent claim, if not paid                     |     |                          |                             |   | 40   | 581                            | 40   | Patent Assignment per property                              | \$ 40 00 |  |
| 109   | 80     | 209     | 40     | **Reissue independent claims over original patent         |     |                          |                             |   | 710  | 246                            | 355  | Filing a submission after final rejection (37 CFR 1 129(a)) |          |  |
| 110   | 18     | 210     | 9      | **Reissue claims in excess of 20 and over original patent |     |                          |                             |   | 710  | 249                            | For each additional invention to be examined (37 CFR 1 129(b)) |   |          |  |
| SUBTOTAL (2) (\$)528 00   |        |         |        |   |     |                          | Other fee (specify)         |   |  |                                |  |   |          |  |
|   |        |         |        |   |     |                          |                             | *Reduced by Basic filing fee Paid SUBTOTAL (3) \$ 40 00 |  |                                |  |   |          |  |
| SUBMITTED BY  |        |         |        |   |     | Complete (if applicable) |                             |   |  |                                |  |   |          |  |
| Typed or Printed Name Robert J. Hess  |        |         |        |   |     | Regi                     | Registration Number 32,139  |   |  |                                |  |   |          |  |
| Cionatura   |        |         |        |   | +   | Dota December 20, 2000   |                             |   |  |                                |  |   |          |  |

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Date

December 29, 2000

Signature